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## Sealing in Brand Equity with Hot Tack

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If you think about it, everyone in the packaging industry contributes significantly to the perceived value of a consumer brand, not merely the graphic designers and brand managers who determine names and logos. Other things, like unreliable heat-seal performance, can jeopardize a brand's equity, its most important asset. Let's examine how.

### Hot tack defined

As defined by Terms of Packaging, hot tack is "the capability of a heat-seal joint to hang together when it is stressed, while still hot from the sealing operation." A more technical definition states that hot tack is "the sum of the cohesive strength of a sealant material as well as its adhesive strength to the remaining elements of the multilayer structure while in the heat-seal temperature range."

The latter definition recognizes that the hot-tack performance of a sealant on the real-life packaging line is as much the responsibility of the structure's performance as it is the sealant's role. The design of the multilayer structure -- that is, the thickness, the placement and the choice of materials -- can either contribute to or detract from the sealant material's inherent ability to provide hot tack. Much as the weak link in a chain affects the chain's overall strength, so does a poorly selected component in the design of a package affect hot tack.

If hot tack is a major requirement, then the packaging engineer should start with the appropriate sealant that provides the hot-tack performance required, then go about selecting the right coextrudable adhesives that do not detract from the structure's real-life performance. Generally, DuPont Surlyn® resins provide the utmost in hot-tack performance over the broadest range of conditions.

### High-performance sealant can boost production

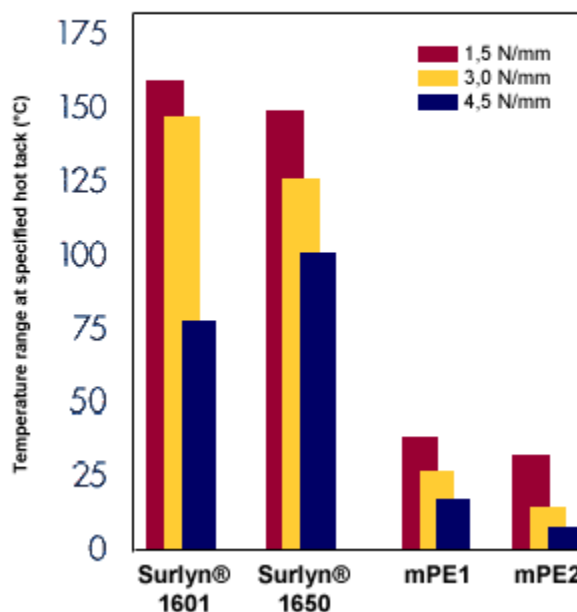
In demanding applications, the many package layers are individually chosen to provide the right combination of moisture and gas barrier, abuse resistance and toughness, optical clarity, seal performance and cost. While the cost of materials is obviously important, the overall cost in per-unit terms is perhaps more important. Use of seemingly more expensive materials, such as a high-performance sealant, can actually result in higher productivity and a lower overall per-unit cost of packaging.

### Securing quality

Packaging is not simply the flexible film surrounding and protecting a valuable brand; it is a system that accomplishes that task. Ensuring that the product's quality and freshness are secure, while enhancing shelf-appeal and convenience, adds real value to the brand.

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### Hot tack operating range for heat sealant resins



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